Document Control No. ECPN UG.510/17/96

Electronic Commerce Processing Node (ECPN)

User's Guide

10/17/96

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Section 1
Introduction

This user's guide applies to Electronic Commerce Processing Node (ECPN), a software component of the system identified as Electronic Commerce/Electronic Data Interchange (EC/EDI). ECPN is being developed by Inter-National Research Institute (INRI) specifically for the EC/EDI system.

ECPN is a menu-driven software application. The procedures for using ECPN and its various menu options are provided within this user's guide as follows:

Setup

Describes the Setup menu options, which enable you to set ECPN system display characteristics.

System

Describes the System menu options, which enable you to set processing parameters for incoming messages and access supplementary software packages.

Messages

Describes the Messages menu options, which enable you to manage incoming and outgoing message logs, automatically generate reports to be sent to EC/EDI sites, and archive and restore EC/EDI data.

Interfaces

Describes the Interfaces menu options, which enable you to establish and monitor incoming communications channels, establish auto-routing tables for routing processed messages, and establish databases of email and network addresses.

Alerts

Describes the Alerts menu options, which enable you to monitor and act upon system-generated alerts.

Oracle

Describes the Oracle menu options, which enable you to perform ORACLE RDBMS archival operations.

Misc

Describes the Misc menu options, which enable you to perform various tasks such as viewing software version information and identifying the computer processes that are making the most demands upon the EC/EDI machine.

GenWatch

Describes the GenWatch application, which is accessed from the Systems menu. GenWatch is a diagnostic tool for pinpointing troubled/downed nodes on a network.

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Section 2
Setup

The options on the Setup menu enable you to set certain overall ECPN system display characteristics such as the font displayed in the windows. This menu also provides an option for exiting ECPN.

The Setup menu provides the following options:

Set Windows Font
: To set the default font for all ECPN windows.

Close All
: To close all open ECPN windows.

Exit
: To exit the ECPN system.

2.1 Set Windows Font

ECPN windows are designed to display all text in the same font. Changing the size of this font can make a noticeable difference in the size of the windows. The Set Windows Font option enables you to set this font as desired.

To set the font for all ECPN windows:

1. From the Setup menu, select Set Windows Font. The Select a Window Font window appears.

Figure 2.1-1 Select a Window Font Window

2. In the list of font options displayed, select a font. You have several options: general font sizes (e.g., SMALL, MEDIUM, LARGE), specific window sizes (e.g., 8x16), and specific font types (e.g., 10 POINT COURIER BOLD). When you make a selection, a sample of the text in that font appears in the Sample Text box.

3. Click Select.

4. Open any ECPN window. This window will appear in the font designated by the setting in the Select a Window Font window. (Any window that was open before you changed the font will need to be closed and then re-opened in order for the setting to apply to it.)

2.2 Close All

Use the Close All option to close all open ECPN windows. When Close All is selected (from the System menu), all ECPN windows will close, and any changes or additions that have not been applied (by clicking OK) will be lost.

2.3 Exit

Use the Exit option to exit ECPN. When Exit is selected (from the Setup menu), ECPN will shut down, and the login screen will reappear.

Section 3
System

The options on the System menu enable you to set processing parameters for incoming messages and access supplementary software applications.

The System menu provides the following options:

Set Site ID

To identify which incoming messages should be processed by a particular site and which should be ignored.

GenWatch

To access GenWatch, a network-monitoring application used to troubleshoot nodes on the network.

NetScape

To access NetScape Navigator™ , a World Wide Web browser program used to display the software version description and access the world-wide web.

3.1 Set Site ID

The Set Site ID option enables you to build and maintain a site ID database identifying ECPN node sites that are message-processing sites. The Set Site ID option also enables you to set criteria that designate which incoming messages should be processed by a particular site and which should be ignored. The system searches for a particular text string in the ISA line of a message and matches it against the active site IDs in the site ID database to determine whether or not a message should be processed at the site. The Set Site ID option allows the flexibility for a site to process messages intended for another site (in the case that the other site is offline for any reason). This is only applicable for messages originating from gateway sites.

Using the Set Site ID option, you can do the following:

- View the current site ID database.
- Add a site ID to the database.
- Edit a site ID in the database.
- Activate or deactivate message processing for a site ID.
- Delete a site ID from the database.

To view the current site ID database:

From the System menu, select Set Site ID. The EDIT SITE ID window appears.

Figure 3.1-1 EDIT SITE ID Window

The EDIT SITE ID window displays an entry under the following column headings for each site ID in the database:

ACTIVE
Indicates whether or not messages intended for the site ID are being processed or not. This column contains an X when the site ID is activated and is empty when the site ID is deactivated.

SITENAME
Name of the site.

ISA FIELD

The ISA FROM: text string to be searched for when determining whether or not to process an incoming message for the site (i.e., the ISA06 field of the message's ISA line).

To add a site ID to the database:

1. In the EDIT SITE ID window, click ADD. The ADD SITE window appears.

Figure 3.1-2 ADD SITE Window

2. To activate the site ID for message processing, click ACTIVE. The site ID is activated if this toggle box is yellow and deactivated if it is black.

3. In the SITE NAME field, enter the name of the site.

4. In the ISA FIELD field, enter the appropriate ISA FROM: text string for the site.

5. To save the changes and add the site ID to the database, click OK.

To edit a site ID in the database:

1. In the EDIT SITE ID window, double-click the site ID, or click it once and then click EDIT. The EDIT SITE window appears. This window has the same format as the ADD SITE window.

2. For instructions on editing the site ID, see the instructions provided for Figure 3.1-2.

To activate and deactivate message processing for a site ID:

In the EDIT SITE ID window, select the site ID and use the ACTIVE checkbox to toggle the option on or off.

To delete one or more site IDs from the database:

1. In the EDIT SITE ID window, select each site ID to be deleted.

2. Click DELETE. A warning window appears, requiring confirmation of the delete process.

3. In the WARNING window, click OK. Each site ID is deleted from the database.

3.2 GenWatch

For instructions on using the GenWatch application, see Appendix A.

3.3 NetScape

For instructions on using NetScape Navigator, refer to the user's documentation provided by the manufacturer.

Section 4
Messages

The options on the Messages menu enable you to manage incoming and outgoing message logs as well as automatically generate reports to be sent to ECPN sites. You may also archive ECPN data to a DAT tape and restore ECPN data from a tape.

The Messages menu provides the following options:

Incoming X12 Messages

To view and manage the incoming message log(s).

Outgoing X12 Messages

To view and manage the outgoing message log(s).

Msg Report DB

To view and manage the message report database.

Archive-Restore

To archive and restore ECPN data to and from a storage device.

4.1 Incoming X12 Messages

The Incoming X12 Messages option enables you to view and manage a database of multiple incoming message logs. This database contains two logs created and maintained automatically by ECPN: the DEFAULT_LOG and the INCOMING_X12_MSGS log.

Initially, all messages received by your workstation will be stored in the INCOMING_X12_MSGS log that is provided by the system. You may, however, reassign certain message types to other message logs. For example, you may wish to store all UDF messages in a log called UDFMSGS. Assignment is based upon operator-specified criteria. Any messages not assigned to a specific log will be stored in the DEFAULT_LOG.

Message types also can be reassigned from one operator-created log to another. Messages of the specified type that are received *after* the reassignment appear in the newly assigned log. Message of the specified type that are received *before* the reassignment remain in the original log. If the message type is turned OFF in a created log, incoming messages of that type will be placed in the DEFAULT_LOG.

Using the Incoming X12 Messages option, you can do the following:

- Access the incoming message logs.
- Add a new incoming log.
- Edit an incoming log.
- Delete an incoming log.
- View or edit the contents of an incoming log.
- Delete the contents of an incoming log.

To access the incoming message logs:

From the Messages menu, select Incoming X12 Messages. The Incoming Log Manager window appears.

Figure 4.1-1 Incoming Log Manager Window

This window contains an entry for the INCOMING_X12_MSGS log, the DEFAULT_LOG, and each operator-created log. The system uses the INCOMING_X12_MSGS log or the DEFAULT_LOG as the holding area until an operator assigns a message type (or types) to another log.

To add a new incoming log:

1. In the Incoming Log Manager window, click ADD. The Add window appears.

Figure 4.1-2 Add Window

2. In the MESSAGE LOG field, enter a name for the log.

3. In the MESSAGE TYPES box, select the message type(s) (OTHER, UDF, X12ISA, X12GS, or X12ST) for the log.

4. In the LOG SIZE field, select the maximum number of messages (up to 10,000) that the log can contain. The default value is 10000.

5. To accept the data displayed, click OK.

To edit an incoming log:

1. In the Incoming Log Manager window, select the incoming log and then click EDIT. The Edit [name] window appears. This window has the same format as the Add window.

2. For instructions on editing the incoming log, see the instructions provided for Figure 4.1-2.

To delete an incoming log:

1. In the Incoming Log Manager window, select the log to be deleted. Note that the DEFAULT_LOG and the INCOMING_X12_MSGS log cannot be deleted.

2. Click DELETE. A warning window appears, prompting you to confirm the deletion. (Once a log has been deleted, all messages that would have been sent to that log will be sent to the DEFAULT_LOG.)

3. Click OK to proceed with the deletion, or click CANCEL to cancel it.

To view or edit the contents of an incoming log:

1. In the Incoming Log Manager window, double-click the incoming log or click it once and then click VIEW LOG. An incoming log window appears. (Note that Figure 4.1-3 shows a sample incoming log window for the DEFAULT_LOG.)

Figure 4.1-3 Sample Incoming Log Window

The upper portion of this window displays the following information. (Note that the color of each NUM label matches the appropriate STATUS color of the message, as further discussed below).

NUM MSGS
Number of messages in the log.

LAST RECV
Time of receipt (TOR) of the last message received.

LOG SIZE
Number of messages that the log will display.

NUM PENDING
Number of messages pending (total number of blue messages).

NUM PROCESSED
Number of messages processed (total number of green messages).

NUM FAILED
Number of messages that failed (total number of red messages).

NUM DELETED
Number of messages deleted (total number of white messages).

NUM OTHER
Number of messages that do not fall into any other category (total number of orange messages).

This window also displays an entry under the following column headings for each message in the log. (Note that all column headings may not appear for each message type.)

GRP CTL #
Group control number of the message.

TYPE
Type of transaction.

ISA DTG
ISA date-time group of the message.

MSG TOR
Time of receipt of the message.

MSG TOP
Time of process of the message.

WRAPPER
Type of X12 message envelope (ISA, GS, ST).

IN CHANNEL
Channel by which the message was received.

ISA FROM
Interchange sender ID.

ISA TO
Interchange receiver ID.

STATUS

Status of the message. Valid entries are as follows:

Status Message	Definition
(The following messages are blue, indicating that they are pending or reprocessing.)	
PENDING	Message processing pending.
REPROCES	Message reprocessed.
(The following messages are green, indicating that they have been processed.)	
PROCESSD	Message processed.
REDECODE	Message redecoded.
(The following messages are white, indicating that they have been deleted.)	
DELETED	Message deleted.
(The following messages are orange, indicating that their category is unknown.)	
UNKNOWN	Message does not fit any other category.
NOSTORE	Message not stored on disk.
(The following messages are red, indicating that they have failed processing.)	
FAILED	Message not processed.
NOSTORE	Message not stored on disk.
INVALID	Invalid message type could not be processed.
MULTI MSG	Message containing multiple messages could not be processed.
MULTI ISA	Message containing multipleISAs could not be processed.
UNEX IEA	Message containing unexpected IEA could not be processed.
MIS IC	Message containing mismatched IC could not be processed.
UNEX GS	Message containing unexpected GS could not be processed.
UNEX GE	Message containing unexpected GE could not be processed.
UNEX ST	Message containing unexpected ST could not be processed.
UNEX SE	Message containing unexpected SE could not be processed.
INCOMPLT	Message incomplete and could not be processed.
NO MSG	Message has no valid ISA or IEA; message is not recognized as a valid message type.
MIS GC	Message containing mismatched GC could not be processed.
MIS TS	Message containing mismatched TS could not be processed.
ISA PARS	Message failed ISA parsing and was not processed.
SITE DB	Message failed site database check and was not processed.

ISA #
Interchange control number.

TRANS CTRL #
Transaction control number.

SOLICIT. #
Solicitation number.

BYTES
Number of bytes in the message.

CLOSING DTG
Closing date.

GS TO
Application receiver's code.

GS FROM
Application sender's code.

PURCHASE ORDER #
Purchase order number.

2. To reprocess a message, select the message and then select REPROCESS from the window's pop-up menu. When errors occur in decoding or envelope validation, use this option to process the message again. Use also to force an outgoing log entry. The entry stays the same in the incoming log window, but the STATUS and color change.

3. To reinject a message, select the message and then select REINJECT from the window's pop-up menu. Use this option to send the message back through pre-processing if a failure has occurred in the segment terminator database, X12/UDF translation, or batch breakup. Another entry is created in the incoming log window.

4. To customize the headings in the incoming log, select SELECT COLUMNS from the window's pop-up menu. The Sort List Test: Column Editor window appears, displaying all available columns in a double column format.

    a. To display additional columns, select each additional column in the REMAINING COLUMNS list and then click the ==> button to move it to the VISIBLE COLUMNS list. Ensure all columns you wish to appear in the incoming log window are listed in the VISIBLE COLUMNS field.

    b. To remove a column from display, select each column to be removed in the VISIBLE COLUMNS list and click the <== button to move it to the REMAINING COLUMNS list. Ensure all columns you wish to appear in the incoming log window are listed in the VISIBLE COLUMNS field.

5. To select all messages in the incoming log window, select SELECT ALL from the window's pop-up menu.

6. To deselect all messages in the incoming log window, select DESELECT ALL from the window's pop-up menu.

7. To update the log at any time, click REFRESH.

8. To view or edit a message in the log:

    a. Double-click the message, or click it once and then click RAW DATA. An EDITOR window appears, displaying the contents of the message.

    b. Use the pull-down menus in the EDITOR window to make changes to the message.

    c. From the File pull-down menu, select Save to save the changes or Exit to exit without saving.

9. To delete a message in the incoming log window, select the message and select DELETE from the window's pop-up menu.

To delete the contents of an incoming log:

1. In the Incoming Log Manager window, select the log and then click CLEAN LOG. A warning window appears, asking if you wish to remove all messages from the log.

2. Click OK to remove the messages, or click CANCEL to cancel the function.

4.2 Outgoing X12 Messages

The Outgoing X12 Messages option enables you to view and manage a database of multiple outgoing message logs. This database contains two logs created and maintained automatically by ECPN: the DEFAULT_LOG and the OUTGOING_X12_MSGS log.

Initially, all X12 messages transmitted by your workstation will be stored in the OUTGOING_X12_MSGS log that is provided by the system. You may, however, reassign certain messages types to other message logs. For example, you may wish to store all ISA messages in a log called ISA_LOG. Assignment is based on operator-specified criteria. Any messages not assigned to a specific log will be stored in the DEFAULT_LOG which is also provided by the system.

Messages also can be reassigned from one operator-created log to another operator-created log. Messages transmitted *after* the reassignment appear in the newly assigned log. Messages transmitted *before* the reassignment remain in the original log. If the message type is turned OFF in a created log, outgoing messages of that type will be placed in the DEFAULT_LOG.

Using the Outgoing X12 Messages option, you can do the following:

- Access the outgoing message logs.
- Add a new outgoing log.
- Edit an outgoing log.
- Delete an outgoing log.
- View or edit the contents of an outgoing log.
- Delete the contents of an outgoing log.

To access the outgoing message logs:

From the Messages menu, select Outgoing X12 Messages. The Outgoing Log Manager window appears.

Figure 4.2-1 Outgoing Log Manager Window

This window contains an entry for the OUTGOING_X12_MSGS log, the DEFAULT_LOG, and each operator-created log. The system uses the OUTGOING_X12_MSGS log or the DEFAULT_LOG as the holding area until an operator assigns a message type (or types) to another log.

To add a new outgoing log:

1. In the Outgoing Log Manager window, click ADD. The Add window appears.

Figure 4.2-2 Add Window

2. In the MESSAGE LOG field, enter a name for the log.

3. In the MESSAGE TYPE box, select the message type(s) (OTHER, UDF, X12ISA, X12GS, or X12ST) for the log.

4. In the LOG SIZE field, select the maximum number of messages (up to 10,000) that the log can contain. The default value is 10000.

5. To accept the data displayed, click OK.

To edit an outgoing log:

1. In the Outgoing Log Manager window, select the outgoing log and then click EDIT. The Edit [name] window appears. This window has the same format as the Add window.

2. For instructions on editing the outgoing log, see the instructions provided for Figure 4.2-2.

To delete an outgoing log:

1. In the Outgoing Log Manager window, select the log to be deleted. Note that the DEFAULT_LOG and the OUTGOING_X12_MSGS log cannot be deleted.

2. Click DELETE. A warning window appears, prompting you to confirm the deletion. (Once a log has been deleted, all messages that would have been sent to that log will be sent to the DEFAULT_LOG.)

To view or edit the contents of an outgoing log:

1. In the Outgoing Log Manager window, select the log and then click VIEW LOG. An outgoing log window appears. (Note that Figure 4.2-3 shows a sample window for the DEFAULT_LOG.)

Figure 4.2-3 Sample Outgoing Log Window

The upper portion of this window displays the following information. (Note that the color of each NUM label matches the appropriate STATUS color of the message, as further discussed below).

NUM MSGS
Number of messages in the log.

LAST SENT
Date and time of last transmitted message.

LOG SIZE
Number of messages that the log will display.

NUM QUEUED
Number of messages queued (total number of blue messages).

NUM XMITTED
Number of messages transmitted (total number of green messages).

NUM FAILED
Number of messages that failed (total number of white messages).

NUM DELETED
Number of messages deleted (total number of white messages).

NUM CON FAILED
Number of messages whose connections have failed (total number of yellow messages).

NUM OTHER
Number of messages that do not fall into any other category (total number of orange messages).

This window also displays an entry under the following column headings for each message in the log. (Note that all column headings may not appear for each message type.)

ISA DTG
Date-time group of the message.

MSG TOR
Time of receipt of the message.

MSG TOP
Time of process of the message.

MSG TOT
Time of transmit of the message.

WRAPPER
Type of X12 message envelope (ISA, GS, ST).

IN CHANNEL
Channel by which the message was received.

OUT CHANNEL
Channel by which the message was transmitted.

ISA FROM
Interchange sender ID.

ISA TO
Interchange receiver ID

STATUS
Status of the message. Valid entries are as follows:

Status Message	Definition
(The following messages are blue, indicating that they are being transmitted.)	
QUEUED	Message transmission pending.
REQUEUED	Message requeued for transmission.
(The following messages are green, indicating that they have been transmitted.)	
XMITTED	Message processed.
RE XMIT	Message retransmitted.
(The following messages are white, indicating that they have been deleted).	
DELETED	Message deleted.
(The following messages are yellow, indicating that the comms connection failed).	
CON FAIL	Message connection failed.
(The following messages are orange, indicating that their category is unknown.)	
UNKNOWN	Message does not fit any other category.
(The following messages are red, indicating that they have been not been	

transmitted.)
FAILED Message not processed.

ISA #
Interchange control number.

BYTES
Number of bytes in the message.

2. To transmit a message, select the message and select XMIT from the window's pop-up menu. The SELECT OUTPUT COMMS CHANNEL window appears. Select one or more channels on which to transmit the message and click OK.

3. To retransmit a message, select the message and select RE-XMIT from the window's pop-up menu.

4. To customize the headings in the outgoing log, select SELECT COLUMNS from the window's pop-up menu. The Sort List Test: Column Editor window appears, displaying all available columns in a double column format.

   a. To display additional columns, select each additional column in the REMAINING COLUMNS list and then click the ==> button to move it to the VISIBLE COLUMNS list. Ensure all columns you wish to appear in the outgoing log window are listed in the VISIBLE COLUMNS field.

   b. To remove a column from display, select each column to be removed in the VISIBLE COLUMNS list and click the <== button to move it to the REMAINING COLUMNS list. Ensure all columns you wish to appear in the outgoing log window are listed in the VISIBLE COLUMNS field.

5. To select all messages in the outgoing log window, select SELECT ALL from the window's pop-up menu.

6. To deselect all messages in the outgoing log window, select DESELECT ALL from the window's pop-up menu.

7. To update the log at any time, click REFRESH.

8. To view or edit a message in the log:

   a. Double-click the message or click it once and then click RAW DATA. An EDITOR window appears, displaying the contents of the message.

   b. Use the pull-down menus in the EDITOR window to make changes to the message as desired.

   c. From the File pull-down menu, select Save to save the changes or Exit to exit without saving.

9. To delete a message in the outgoing log window, select the message and select DELETE from the window's pop-up menu.

To delete the contents of an outgoing log:

1. In the Outgoing Log Manager window, select the log and then click CLEAN LOG. A warning window appears, asking if you wish to remove all messages from the log.

2. Click OK to remove the messages, or click CANCEL to cancel the function.

4.3 Msg Report DB

The Msg Report DB option enables you to view and manage the ECPN message report database. This database provides the capability to automatically generate message reports that can be sent to any site that is performing programs with ECPN.

Using the Msg Report DB option, you can do the following:

- Access the message report database.
- Add a site to the database.
- Edit a site in the database.
- View an incoming status report for a site.
- View an outgoing status report for a site.
- Delete a site from the database.
- Delete reports from the database for a site.
- Send the reports for a site.
- Activate the reports for a site.
- Deactivate the reports for a site.

To access the message report database:

From the Messages menu, select Msg Report DB. The MESSAGE REPORT DATABASE window appears.

Figure 4.3-1 MESSAGE REPORT DATABASE Window

The MESSAGE REPORT DATABASE window displays an entry under the following column heading for each entry in the database:

SITE
Site name.

STATUS
Status of site's message reports, automatic notification, and cleaning function; either ON or OFF.

To add a site to the message report database:

1. In the MESSAGE REPORT DATABASE window, click ADD. The ADD SITE window appears.

Figure 4.3-2 ADD SITE Window

2. Click the list box preceding the SITE NAME field to display a list of valid site names. Select an entry from the list.

3. In the EMAIL LIST box, specify the email address(es) to which the message reports should be sent as follows. (Instructions for sending the reports are provided later in this subsection.)

   a. To add an address, click ADD. The ADD EMAIL ADDRESS window appears. Enter the address and click OK. Up to 100 email addresses may be added.

   b. To edit an address, select an address and then click EDIT. The EDIT EMAIL ADDRESS window appears. Edit the data and click OK.

   c. To delete an address, select an address and then click DELETE. A warning window appears, asking if you want to delete the address. Click YES to delete the address.

4. In the SEND REPORT box, select the type of reports to send: INCOMING, OUTGOING, or both. The selected reports will be sent to each addressee entered in the EMAIL LIST box.

5. In the SEND field of the CYCLES box, enter the time, in hours, when you want the message reports automatically sent to the email address(es) in the EMAIL LIST box.

6. In the CLEAN field of the CYCLES box, enter the time, in hours, when you want the reports automatically cleaned (i.e., removed) from the database. This time starts from midnight of each day. Example: If you set both the SEND and the CLEAN times for 10 hours, the system will send and clean at 1000 and 2000 hours each day. If the fields are blank, no reports will be sent or cleaned.

To edit a site in the message report database:

1. In the MESSAGE REPORT DATABASE window, double-click the site, or click it once and then click EDIT. The EDIT SITE window appears. This window has the same format as the ADD SITE window.

2. For instructions on editing the site, see the instructions provided for Figure 4.3-2.

To view an incoming status report for a site:

1. In the MESSAGE REPORT DATABASE window, select a site and then select INCOMING STATS from the window's pop-up menu. The VIEW STATS window appears.

Figure 4.3-3 VIEW STATUS Window

The VIEW STATS window for incoming messages contains the following fields:

LAST SENT TIME
Last time a message report for the selected site was sent.

LAST CLEAN TIME
Last time message reports for the selected site were cleaned from the system.

UNREC BATCH SEGS
Number of unrecognized batch segments.

MESSAGE COUNT
Total number of messages from ISA COUNT and FAILED ISA fields.

ISA COUNT
Number of ISA messages received.

FAILED ISA
Number of ISA messages that failed.

GS COUNT
Number of GS messages received.

FAILED GS
Number of GS messages that failed.

ST COUNT
Number of ST messages received.

FAILED ST
Number of ST messages that failed.

2. To update the information in the window, click REFRESH.

To view an outgoing status report for a site:

1. In the MESSAGE REPORT DATABASE window, select a site and then select OUTGOING STATS from the window's pop-up menu. The VIEW STATS window appears.

Figure 4.3-4 VIEW STATS Window

The VIEW STATS window for outgoing messages contains the following fields:

LAST SENT TIME
Last time a message report for the selected site was sent.

LAST CLEAN TIME
Last time message reports for the selected site were cleaned from the system.

ISA COUNT
Number of ISA messages transmitted.

2. To update the information in the window, click REFRESH.

To delete a site from the message report database:

1. In the MESSAGE REPORT DATABASE window, select one or more sites to delete.

2. Click DELETE. The CONFIRM DELETION OF SITES window appears, listing each site selected for deletion. Unselect any sites not to be deleted.

3. To delete the selected site(s), click OK.

To delete the reports from the database for a site manually:

1. In the MESSAGE REPORT DATABASE window, select a site.

2. From the window's pop-up menu, select CLEAN. The CONFIRM CLEANING OF SITES window appears.

3. To delete reports for the selected site, click OK. Reports will continue to delete automatically if a time was entered in the CLEAN field of the ADD SITE window

To send the reports for a site manually:

The following instructions explain how to send message reports to a site. The type(s) of reports to be sent are specified in the SEND REPORT box (in the ADD SITE window), and the addressee(s) are specified in the EMAIL LIST box. Incoming status reports are transmitted with the title X12 STATS REPORTS FOR MESSAGES RECEIVED BY [channel name]. Outgoing status reports are transmitted with the title X12 STATS REPORTS FOR MESSAGES FORWARDED OUT OF [channel name]. The first part of the report contains the same fields as the appropriate VIEW STATS window (Figure 4.3-3 or Figure 4.3-4). The next part of the report contains a listing of any failed messages, as applicable. The last part of the report contains message statistics for each message recipient, displayed under the following column headings:

Record Number
Sequence number.

Intchg Cntl Number
Identification number of an ISA message.

Sender Code
Functional group sender's code.

Receiver Code
Functional group receiver's code.

Trans Set
Number of transaction sets (ST) included in a functional group.

Chars (size)
Size of transaction set.

Trans Type
Type of transaction.

Solicitation Number
Solicitation number associated with the message, if applicable.

Purchase Order Number
Purchase order number associated with the message, if applicable.

1. In the MESSAGE REPORT DATABASE window, select a site.

2. From the window's pop-up menu, select SEND. The CONFIRM SEND OF SITE REPORTS window appears.

3. Click OK. Reports will continue to send automatically if a time was entered in the SEND field of the ADD SITE window

To activate the reports for one or more sites:

1. In the MESSAGE REPORT DATABASE window, select one or more entries with the status of OFF.

2. From the window's pop-up menu, select ACTIVATE.

To deactivate the reports for one or more sites:

1. In the MESSAGE REPORT DATABASE window, select one or more entries with the status of ON.

2. From the window's pop-up menu, select DEACTIVATE.

4.4 Archive-Restore

The Archive-Restore option enables you to archive ECPN data from the clipboard to a storage device (floppy disk, cartridge or DAT tape, or a backup area on the hard disk) and to restore data from a storage device back to the clipboard. The clipboard is a holding area for files to be archived or restored. After the files have passed through the clipboard to their final destination, they should be deleted from the clipboard.

Using the Archive-Restore option, you can do the following:

- Set the parameters to archive or restore ECPN data.
- Archive files.
- Restore files.
- Delete files.
- Copy from the clipboard to the database.
- Format a diskette or floppy disk.
- Eject a diskette.

To set the parameters to archive or restore ECPN data:

1. From the Messages menu, select Archive-Restore. The ARCHIVE-RESTORE FILES window appears.

Figure 4.4-1 ARCHIVE-RESTORE FILES Window

2. In the DEVICE box, view a list of devices used to archive or restore information. The LCL BACKUP 1, 2, and 3 devices represent three distinct areas reserved on the workstation's hard disk for archiving purposes.

3. In the SPACE box, view the following fields:

AVAILABLE
The available space on the chosen device. If this field is blank, it indicates that sufficient space is available for large archive and restore jobs.

USED

The space that will be used when the selected files are archived to the device.

4. **In the CLIPBOARD box, view a list of each file currently on the clipboard. The number of current files (out of 1000 possible) appears at the top of the CLIPBOARD box. The CLIPBOARD box displays an entry under the following column headings for each entry in the clipboard.**

DATA TYPE
Database type of the file.

DATA NAME
Name of the file.

SAVED
Indicates whether the file has been archived during the current session (YES or NO).

SIZE (KB)
File size (in kilobytes).

To archive files:

This process archives files from the clipboard to a storage device. The files must first be copied to the clipboard from a database or table within the system (as described in Step 1 below). The storage device may be a floppy disk, a magnetic tape, or a backup area on the hard disk of the workstation.

1. **Copy the desired files to the clipboard by using the ARCHIVE option on the pop-up menu of the applicable database or table (for example, the EMAIL Address Table, described in Section 5.4). This step may be repeated multiple times for additional databases and tables.**

2. **In the ARCHIVE-RESTORE FILESwindow, verify that each file selected in Step 1 appears in the CLIPBOARD box.**

3. **If needed, place a formatted disk or tape in the drive. Note that any data currently on that device will be overwritten with the newly archived data.**

4. **In the DEVICE box, select a storage device by clicking the appropriate knob. The AVAILABLE field shows the amount of space on the selected device. The USED field shows 0 KB.**

5. **In the CLIPBOARD box, select the files to be archived. Any combination of different file types may be archived to one backup area. When multiple files are selected in the CLIPBOARD box, the USED field shows the amount of space required for all files. As more files are selected, the amount of space in the USED field increases, and the amount in the AVAILABLE field decreases. If more files than can fit onto the storage device are selected, an EOT (end of tape) warning is shown.**

6. **Click ARCHIVE. Follow any instructions on the screen to complete the process. As each file is archived, the value in the SAVED column of the CLIPBOARD box changes from NO to YES.**

7. **To avoid confusion, after the files have been archived, delete them from the clipboard (as described later in this section).**

To restore files:

This process restores only those files that were archived to a storage device using the ARCHIVE button in the ARCHIVE-RESTORE FILES window.

1. **If the files are archived on a disk or tape, insert the disk or tape into the drive.**

2. **In the DEVICE box, select the device type where the files are archived.**

3. **To restore the files from the device to the clipboard, click RESTORE.**

4. **Follow any instructions that appear on the screen. Note that, after the files are restored, they appear in the CLIPBOARD box.**

5. **Copy the files back into the original database using one of these methods:**

   a. **In the ARCHIVE-RESTORE FILES window, select the files in the CLIPBOARD box and then select the CLIPBOARD TO DB option from the window's pop-up menu.**

   b. **In the window for the appropriate database or table, select the RESTORE option from the window's pop-up menu to restore files of that type.**

Note: To avoid confusion, after the files have been restored to the original database, delete them from the clipboard.

To delete files from the clipboard:

1. **In the ARCHIVE-RESTORE FILES window, select the file(s) to delete from the CLIPBOARD box.**

2. **Click DELETE.**

Note: Deleting files from the clipboard does not delete them from the database or from the backup device.

To copy all files from the clipboard to their databases:

1. **In the ARCHIVE-RESTORE FILES window, select the file(s) to be copied back from the CLIPBOARD box to their respective databases.**

2. **In the ARCHIVE-RESTORE FILES window pop-up menu, select CLIPBOARD TO DB.**

To format a 3.5 inch diskette or a 5.25 inch floppy disk:

1. **In the ARCHIVE-RESTORE FILES window, click the knob for either 3 1/2 INCH DISKETTE or 5 1/4 INCH FLOPPY.**

2. **At the system prompt, insert an unformatted disk in the disk drive.**

3. **In the ARCHIVE-RESTORE FILES window pop-up menu, select FORMAT. A format window appears.**

4. **Click the LOW or HIGH knob for the storage capacity (density) of the disk.**

5. **Click OK to begin formatting (or CANCEL to discard the format request).**

6. **While a disk is formatting, an ABORT window appears. For a 3.5 inch diskette, the ABORT button stops the format process. For a 5.25 inch floppy, the ABORT button has no effect.**

To eject a 3.5 inch diskette:

In the ARCHIVE-RESTORE FILES window pop-up menu, select EJECTS 3 1/2 IN. The diskette is ejected from the disk drive.

Section 5
Interfaces

The options on the Interfaces menu enable you to establish and monitor communications channels to receive and process incoming messages. You may also establish autorouting tables used to route processed messages and establish databases of email and network addresses to facilitate certain types of message processing.

The Interfaces menu provides the following options:

Configure Interface
: To configure various communications (comms) channels to send and receive messages between VANs and gateways.

X12 Routing Table
: To automatically route specific types of incoming and outgoing messages to selected destinations.

Network Host Table
: The Network Host Table option is not available at this time.

EMAIL Address Table
: To create and maintain a table of addresses for sites that communicate by email.

Seg Terminator DB
: To normalize incoming messages so that they may be read in the ISA format.

Remote User DB
: To maintain a database to access files sent from remote sites via ftp or email.

5.1 Configure Interface

Use the Configure Interface option to configure various communications (comms) channels to send and receive messages between VANs and gateways.

Using the Configure Interface option, you can do the following:

- View the current comms channel.
- Add a comms channel.
- Delete a comms channel.
- Edit a CLEO channel.
- Edit an EMAIL channel.
- Edit an FTP channel.
- Edit a KERMIT channel.
- Edit a ZMODEM channel.

To view the current comms channel database:

From the Interfaces menu, select Configure Interface. The COMMUNICATIONS window appears.

Figure 5.1-1 COMMUNICATIONS Window

The COMMUNICATIONS window contains an entry under the following column headings for each channel in the database:

NAME
Unique channel name.

XREF
Unique three-character communications cross-reference code for the channel.

TYPE
Type of channel; either GW (Gateway), VAN (Value-Added Network), NEP (Network Entry Point), or AIS (Automated Information System).

INTERFACE
Type of interface used by the channel; either CLEO, EMAIL, FTP, KERMIT, or ZMODEM.

MACHINE
Name of the machine used by the channel to transmit or receive messages.

MSG TYPE
Type of messages to be processed by the channel; either X12ISA (X12 protocol) or UDF (User Data Format) messages.

DEVICE
Device name (tty serial port) used by the channel.

STARTUP
Type of startup specified for the channel; either MANUAL or AUTO.

STATUS
Channel status; either ON or OFF.

The COMMUNICATIONS window contains a pop-up menu that provides the following options to turn the channels on and off. (To display the pop-up menu, place the pointer anywhere within the window and click the right trackball button.)

CAUTION: Turning on and off communications channels can cause messages that are enroute to be lost. Be careful when using these options. Do not turn channels on and off unnecessarily.

START
To turn on a channel. Select a channel with a status of OFF and then select this option to enable communications through the channel.

STOP
To turn off a channel. Select a channel with a status of ON and then select this option to disable communications through the channel.

RESTART
To turn on a channel, whether its status is currently ON or OFF.

To add a comms channel:

1. In the COMMUNICATIONS window, click ADD. The ADD CHANNEL window appears.

Figure 5.1-2 ADD CHANNEL Window

2. In the NAME field, enter a name for the comms channel. Name is restricted to alpha-numeric, underline (_), and hyphen (-) characters.

3. In the XREF field, enter the unique three-character communications cross-reference code for the channel.

4. Click the NODE TYPE field to display a list of valid node types. Select an entry (either GW, VAN, NEP, or AIS) from the list.

5. Click the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

6. In the INTERFACE list, select the type of interface that the channel will use. Available interface types are as follows:

Interface	Function
CLEO®	Modem dial-up serial-type interface.
EMAIL	Uses the email pathway to send and receive messages.
FTP	Uses standard file transfer protocol to send and receive messages.
KERMIT®	Modem dial-up serial-type interface.
ZMODEM	Modem dial-up serial-type interface.

7. To accept the new channel, click OK.

To edit a comms channel:

In the COMMUNICATIONS window, select a channel to edit and then click EDIT. The EDIT CHANNEL window for the selected channel appears.

Instructions for editing a channel vary according to the interface type used by the channel. The following subsections describe how to edit a comms channel associated with each interface type:

- CLEO Channel: Section 5.1.1
- EMAIL Channel: Section 5.1.2
- FTP Channel: Section 5.1.3
- KERMIT Channel: Section 5.1.4
- ZMODEM Channel: Section 5.1.5

To delete one or more comms channels:

1. In the COMMUNICATIONS window, select each comms channel to be deleted.

NOTE: No warning/confirmation window appears when only one channel is selected for deletion. Ensure that only the desired comms channel to be deleted is selected before clicking the DELETE button.

2. Click DELETE.

   - If only one channel was selected, the comms channel is deleted from the system.

   - If more than one channel was selected for deletion, a warning box appears, asking for confirmation of the deletion of x channels, where x is the number of channels selected. Click OK to delete the comms channels, or click Cancel to stop the delete function and return to the COMMUNICATIONS window.

5.1.1 CLEO Channel

1. In the COMMUNICATIONS window, select a CLEO channel and then click EDIT. The EDIT CLEO window appears.

Figure 5.1-3 EDIT CLEO Window

2. In the NAME field, verify the unique channel name.

3. In the XREF field, verify the unique three-character communications cross-reference code for the channel.

4. In the NODE TYPE field, verify the type of node.

5. In the INTERFACE field, verify the type of interface.

6. Click the list box preceding the DEVICE field to display a list of valid devices. Select an entry from the list.

7. Click the list box preceding the MACHINE field to display a list of valid machines to transmit or receive messages on the channel. Select an entry from the list.

8. Click the list box preceding the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

9. The AUTOSTART field indicates whether or not the channel should be turned on automatically upon ECPN startup. Toggle on or off.

10. In the PBX ACCESS CODE field, enter the PBX access code required for the local telephone to dial into the network.

11. In the PBX TIME DELAY field, enter a PBX time delay (in seconds).

12. In the TELEPHONE NUM field, enter the telephone number to dial.

13. In the ACCESS CODE field, enter the security access code (if any) required for the local telephone to dial into the system.

14. In the DIAL TIMEOUT field, enter the time delay (in seconds) to wait after dialing the PBX access code and before dialing the telephone number.

15. In the REDIAL ATTEMPTS field, enter the number of times to redial before failing.

16. In the COMMS CYCLE field, enter the rate (in seconds) at which to initiate CLEO communications. Default value is 600.

17. In the XMIT RECORD SIZE field, enter the maximum size for a transmission record.

18. In the REPEAT LIMIT field, enter the maximum number of consecutive times that an enquiry message will be sent as a repeat message without an appropriate response.

19. In the RE-XMIT LIMIT field, enter the maximum number of consecutive times that a negative acknowledgment may be sent or received before transmission is aborted.

20. In the WAIT LIMIT field, enter the maximum number of consecutive times that a wait message will be received before transmission is aborted.

21. In the DELAY LIMIT field, enter the maximum number of consecutive times that a delay message will be received before transmission is aborted.

22. In the BID LIMIT field, enter the maximum number of consecutive times that an enquiry message will be sent as a line bid without receiving acknowledgment.

23. In the RECEIVE LIMIT field, enter the maximum number of consecutive times that a receive timeout may occur in receive mode before the transmission is aborted.

24. In the BLOCKING FACTOR field, enter the number of records to be transmitted.

25. In the COMPRESSION box, click either the ON or OFF knob to activate or deactivate space compression on transmitted messages. When activated, two or more consecutive spaces are removed from transmitted text files.

26. In the SUPPRESS NL box, click either the ON or OFF knob to activate or deactivate new line character suppression. When activated, all record separators are ignored. When deactivated, any record separators received in text files will be translated to carriage return and line feed characters in MS-DOS® or to new line characters in UNIX® .

27. In the MODEM TYPES box, select the type of modem to use. Refer to the CLEO 3780Plus User's Guide, Appendix A, Modem Support for more information on modem types.

28. In the PROTOCOL box, select the type of protocol to use, either 2780 or 3780.

29. In the TERM TYPE box, select the appropriate terminal type:

    - PRIMARY: To send line bid messages at one-second intervals
    - SECONDARY: To send line bid messages at three-second intervals

30. To access the CLEO command file (i.e., the ASCII text command file that is created when the interface parameters are initially set and is updated each time any of the parameter settings are edited and applied):

    a. Click SCRIPT. The EDIT CLEO COMMAND FILE window appears, displaying the name of the selected CLEO channel in the title bar and the contents of the text file in the window area.

Figure 5.1-4 EDIT CLEO COMMAND FILE Window

    b. Edit the text file as desired.

    c. Use the buttons in the EDIT CLEO COMMAND FILE window as follows:

PGUP
To scroll the text up one window at a time.

PGDN
To scroll the text down one window at a time.

HOME
To return the cursor (and the window view) to the first line of the file in the first character position.

END

To move the cursor (and the window view) to the last line of the file in the last character position.

INSRT

To insert a blank line just above the line where the cursor is currently located.

LDEL

To delete the line where the cursor is currently located.

SAVE

To save the changes to the text file and exit the EDIT CLEO COMMAND FILE window.

CANCEL

To discard any unsaved changes and exit the EDIT CLEO COMMAND FILE window.

31. To save all changes made to the channel, click OK in the EDIT CLEO COMMAND FILE window. If the channel is turned on while editing, clicking OK automatically stops the channel and restarts it with the new settings.

5.1.2 EMAIL Channel

1. In the COMMUNICATIONS window, select an EMAIL channel and click EDIT. The EDIT EMAIL window appears.

Figure 5.1-5 EDIT EMAIL Window

2. In the NAME field, verify the unique channel name.

3. In the XREF field, verify the unique three-character communications cross-reference code for the channel.

4. In the NODE TYPE field, verify the type of node.

5. In the INTERFACE field, verify the type of interface.

6. Click the list box preceding the MACHINE field to display a list of valid machines to transmit or receive messages on the channel. Select an entry from the list.

7. Click the list box preceding the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

8. The AUTOSTART field indicates whether or not the channel should be turned on automatically upon ECPN startup. Toggle on or off.

9. In the COMMS CYCLE field, enter the rate (in seconds) at which to initiate EMAIL communications. Default value is 300.

10. In the MULTIPLE FILES box, select the mode of file transfer. If the MSG TYPE field displays UDF, only MULTIPLE FILES TRANSFER may be selected.

    a. To specify that all files transmitted during a cycle will be appended together and sent as a single large file, select BATCH FILES TRANSFER.

    b. To specify that more than one file being transmitted during a cycle will not be appended together and will instead be sent as multiple smaller files, select MULTIPLE FILES TRANSFER.

11. To save all changes made to the channel, click OK in the EDIT EMAIL window. If the channel is turned on while editing, clicking OK automatically stops the channel and restarts it with the new settings.

5.1.3 FTP Channel

1. In the COMMUNICATIONS window, select an FTP channel and click EDIT. The EDIT FTP window appears.

Figure 5.1-6 EDIT FTP Window

2. In the NAME field, verify the unique channel name.

3. In the XREF field, verify the unique three-character communications cross-reference code for the channel.

4. In the NODE TYPE field, verify the type of node.

5. In the INTERFACE field, verify the type of interface.

6. Click the list box preceding the MACHINE field to display a list of valid machines to transmit or receive messages on the channel. Select an entry from the list.

7. Click the list box preceding the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

8. The AUTOSTART field indicates whether or not the channel should be turned on automatically upon ECPN startup. Toggle on or off.

9. In the MULTIPLE FILES box, select the mode of file transfer. If the MSG TYPE field displays UDF, only MULTIPLE FILES TRANSFER may be selected.

    a. To specify that all files transmitted during a cycle will be appended together and sent as a single large file, select BATCH FILES TRANSFER and then enter a name for the file in the FILE NAME field. If the file already exists at a destination, the information in this cycle will be appended to the existing file rather than overwriting the existing file. If the FILE NAME field is left blank, the file will be named using the convention of XREF.DDHHMM, where XREF is the XREF code of the outgoing channel and DDHHMM is a timestamp that includes the Julian date, hour, and minute the file was transmitted.

    b. To specify that more than one file being transmitted during a cycle will not be appended together and will instead be sent as multiple smaller files, select MULTIPLE FILES TRANSFER. The files will be named using the convention of NAME.DDHHMMSS.EXT#, where:

        - NAME -- is derived from the MLOG channel XREF, or the MLOG channel name, or the outgoing channel XREF, in this order, whichever of these items is found first.

        - DDHHMMSS -- is derived from the Julian date, hour, minute, and second the message is transmitted.

        - EXT# -- is a two-digit extension number established as 00 at the start of each cycle for the channel and increased by 01 as each message is transmitted.

10. In the IP ADDRESS field, enter the Internet Protocol (IP) address of the remote host.

11. In the LOGIN NAME field, enter the login name designated for FTP login use at the remote host.

12. In the PASSWORD field, enter the password for the specified login name at the remote host.

13. In the REMOTE IN DIR field, enter the directory relative to the login directory pathname of the directory to which messages will be transmitted.
14. In the REMOTE OUT DIR field, enter the directory relative to the login directory pathname of the directory from which messages will be received.

15. In the COMMS CYCLE field, enter the rate (in seconds) at which to initiate FTP communications. Default value is 300.

16. In the PROTOCOL box, select the appropriate protocol type:

    - PUSH: Send-only function; will only transmit messages to the designated directory.

    - PUSH/PULL: Send-and-receive function; will transmit messages to the designated IN directory of the FTP'd host and retrieve any waiting messages from the designated OUT directory of the FTP'd host.

17. To save all changes made to the channel, click OK in the EDIT FTP window. If the channel is turned on while editing, clicking OK automatically stops the channel and restarts it with the new settings.

5.1.4 KERMIT Channel

1. In the COMMUNICATIONS window, select a KERMIT channel and click EDIT. The EDIT KERMIT window appears.

Figure 5.1-7 EDIT KERMIT Window

2. In the NAME field, verify the unique channel name.

3. In the XREF field, verify the unique three-character communications cross-reference code for the channel.

4. In the NODE TYPE field, verify the type of node.
5. In the INTERFACE field, verify the type of interface.

6. Click the list box preceding the DEVICE field to display a list of valid devices. Select an entry from the list.

7. Click the list box preceding the MACHINE field to display a list of valid machines to transmit or receive messages on the channel. Select an entry from the list.

8. Click the list box preceding the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

9. The AUTOSTART field indicates whether or not the channel should be turned on automatically upon ECPN startup. Toggle on or off.

10. In the MULTIPLE FILES box, select the mode of file transfer. If the MSG TYPE field displays UDF, only MULTIPLE FILES TRANSFER may be selected.

    a. To specify that all files transmitted during a cycle will be appended together and sent as a single large file, select BATCH FILES TRANSFER and then enter a name for the file in the FILE NAME field. If the file already exists at a destination, the information in this cycle will be appended to the existing file rather than overwriting the existing file. If the FILE NAME field is left blank, the file will be named using the convention of XREF.DDHHMM, where XREF is the XREF code of the outgoing channel and DDHHMM is a timestamp that includes the Julian date, hour, and minute the file was transmitted.

    b. To specify that more than one file being transmitted during a cycle will not be appended together and will instead be sent as multiple smaller files, select MULTIPLE FILES TRANSFER. The files will be named using the convention of NAME.DDHHMMSS.EXT#, where:

- NAME -- is derived from the MLOG channel XREF, or the MLOG channel name, or the outgoing channel XREF, in this order, whichever of these items is found first.
- DDHHMMSS -- is derived from the Julian date, hour, minute, and second the message is transmitted.
- EXT# -- is a two-digit extension number established as 00 at the start of each cycle for the channel and increased by 01 as each message is transmitted.

11. In the TELEPHONE NUM field, enter the telephone number to dial.
12. In the LOGIN NAME field, enter the login name designated for KERMIT login use at the remote host.
13. In the PASSWORD field, enter the password for the specified login name at the remote host.
14. In the REMOTE IN DIR field, enter the directory relative to the login directory pathname of the directory to which messages will be transmitted.

15. In the REMOTE OUT DIR field, enter the directory relative to the login directory pathname of the directory from which messages will be received.

16. In the COMMS CYCLE field, enter the rate (in seconds) at which to initiate KERMIT communications. Default value is 600.

17. In the DIAL TIMEOUT field, enter the time (in seconds) to wait before determining that a connection cannot be established.

18. In the XMIT PACKET SIZE field, enter the size of a transmission data packet.

19. In the RECV PACKET SIZE field, enter the expected size of a received packet of data.

20. In the RECV EOF field, enter the value for the expected receive end-of-packet character (decimal value).

21. In the ESCAPE CHAR field, enter the value for the escape character during "connect" (decimal ASCII value).

22. In the WINDOW SIZE field, enter the number of windows to use in the sliding windows protocol.

23. In the BAUD box, select the baud rate for transmission over the channel.

24. In the BYTE SIZE box, select the number of bits per character for serial communications. ASCII and BINARY data types default to 8.

25. In the BLOCK CHECK box, select a block check value. The value used indicates the level of error detection provided by KERMIT. Type 1 is standard, and catches most errors. Types 2 and 3 specify more rigorous checking, but at the cost of higher overhead.

26. In the PARITY box, select the parity of the transmissions over the channel.

27. To access the KERMIT command file (i.e., the ASCII text command file that is created when the interface parameters are initially set and is updated each time any of the parameter settings are edited and applied):

    a. Click SCRIPT. The EDIT COMMAND FILE window appears, displaying the name of the KERMIT channel selected in the title bar and the contents of the text file in the window area.

    b. Use the EDIT COMMAND FILE window as described in the instructions for Figure 5.1-4.

28. To save all changes made to the channel, click OK in the EDIT COMMAND FILE window. If the channel is turned on while editing, clicking OK automatically stops the channel and restarts it with the new settings.

5.1.5 ZMODEM Channel

1. In the COMMUNICATIONS window, select a ZMODEM channel and click EDIT. The EDIT ZMODEM window appears.

Figure 5.1-8 EDIT ZMODEM Window

2. In the NAME field, verify the unique channel name.

3. In the XREF field, verify the unique three-character communications cross-reference code for the channel.

4. In the NODE TYPE field, verify the type of node.
5. In the INTERFACE field, verify the type of interface.

6. Click the list box preceding the MACHINE field to display a list of valid machines to transmit or receive messages on the channel. Select an entry from the list.

7. Click the list box preceding the MSG TYPE field to display a list of valid message types that may be processed by the channel. Select an entry (either X12ISA or UDF) from the list.

8. The AUTOSTART field indicates whether or not the channel should be turned on automatically upon ECPN startup. Toggle on or off.

9. In the MULTIPLE FILES box, select the mode of file transfer. If the MSG TYPE field displays UDF, only MULTIPLE FILES TRANSFER may be selected.

    a. To specify that all files transmitted during a cycle will be appended together and sent as a single large file, select BATCH FILES TRANSFER and then enter a name for the file in the FILE NAME field. If the file already exists at a destination, the information in this cycle will be appended to the existing file rather than overwriting the existing file. If the FILE NAME field is left blank, the file will be named using the convention of XREF.DDHHMM, where XREF is the XREF code of the outgoing channel and DDHHMM is a timestamp that includes the Julian date, hour, and minute the file was transmitted.

    b. To specify that more than one file being transmitted during a cycle will not be appended together and will instead be sent as multiple smaller files, select MULTIPLE FILES TRANSFER. The files will be named using the convention of NAME.DDHHMMSS.EXT#, where:

        - NAME -- is derived from the MLOG channel XREF, or the MLOG channel name, or the outgoing channel XREF, in this order, whichever of these items is found first.

- DDHHMMSS -- is derived from the Julian date, hour, minute, and second the message is transmitted.

- EXT# -- is a two-digit extension number established as 00 at the start of each cycle for the channel and increased by 01 as each message is transmitted.

10. In the TELEPHONE NUM field, enter the telephone number to dial.

11. In the LOGIN NAME field, enter the login name designated for ZMODEM login use at the remote host.

12. In the PASSWORD field, enter the password for the specified login name at the remote host.

13. In the REMOTE IN DIR field, enter the directory relative to the login directory pathname of the directory to which messages will be transmitted.

14. In the REMOTE OUT DIR field, enter the directory relative to the login directory pathname of the directory from which messages will be received.

15. In the COMMS CYCLE field, enter the rate (in seconds) at which to initiate ZMODEM communications. Default value is 600.

16. In the DIAL TIMEOUT field, enter the time (in seconds) to wait before determining that a connection cannot be established.

17. In the XMIT PACKET SIZE field, enter the size of a transmission data packet.

18. In the RECV PACKET SIZE field, enter the expected size of a received packet of data.

19. In the RECV EOF field, enter the value for the expected receive end-of-packet character (decimal value).

20. In the ESCAPE CHAR field, enter the value for the escape character during "connect" (decimal ASCII value).

21. In the WINDOW SIZE field, enter the number of windows to use in the sliding windows protocol.

22. In the BAUD box, select the baud rate for transmissions over the channel.

23. In the BYTE SIZE box, select the number of bits per character for serial communications. ASCII and BINARY data types default to 8.

24. In the BLOCK CHECK box, select a block check value. The value used indicates the level of error detection provided by ZMODEM. Type 1 is standard, and catches most errors. Types 2 and 3 specify more rigorous checking, but at the cost of higher overhead.

25. In the PARITY box, select the parity of the transmissions over the channel.

26. The SCRIPT button allows the user to access the ZMODEM command file (i.e., the ASCII text command file that is created when the interface parameters are initially set and is updated each time any of the parameter settings are edited and applied):

    a. Click SCRIPT. The EDIT COMMAND FILE window appears, displaying the name of the ZMODEM channel selected in the title bar and the contents of the text file in the window area.

    b. Use the EDIT COMMAND FILE window as described in the instructions for Figure 5.1-4.

27. To save all changes made to the channel, click OK. If the channel is turned on while editing, clicking OK automatically stops the channel and restarts it with the new settings.

5.2 X12 Routing Table

Use the X12 Routing Table option to automatically route incoming messages to selected destinations.

When a message enters the system and is processed, it is checked against the active entries in the routing table for a match. If there is a match of the source channel, source, the message is transmitted to the destinations in the routing table entry. Up to 500 entries are allowed in the routing table.

The system ensures that routing does not create message loops. Before a message is routed, the sending station is removed from the routing TO list so it does not receive the message again.

Using the X12 Routing Table option, you can do the following:

- Access the routing table.
- Add an entry.
- Edit a table entry.
- Delete a table entry.

To access the routing table:

1. From the Interfaces menu, select X12 Routing Table. The X12 ROUTING TABLE window appears.

Figure 5.2-1 X12 ROUTING TABLE Window

The X12 ROUTING TABLE window displays an entry under the following column headings for each entry in the table. Active entries display in light blue, and inactive entries display in white.

SRC CHANL
Channel that received the incoming message.

SRC CRIT: DATA
Parameters used to determine the routing path.

DES CHANL
Channel to which the incoming message should be routed.

DST1 - DST5
Up to five sub-destinations to which the incoming message should be routed.

STATUS
Whether messages that meet the preceding criteria should be routed: ON or OFF.

2. To save the routing table to a system clipboard temporarily, select ARCHIVE from the window's pop-up menu. Using the ARCHIVE AND RESTORE feature, the table can then be moved to storage media. (Refer to Section 4.4 for more details.)

3. To restore an archived routing table from the clipboard, select RESTORE from the window's pop-up menu. (Refer to Section 4.4 for more details.)

4. To activate an entry:

   a. Highlight one or more entries in the X12 ROUTING TABLE window.
   b. Select ACTIVATE.

   When an entry is ON, the system checks each incoming message against the entry's criteria to determine whether the message should be routed to the specific destinations.

5. To de-activate an entry:

   a. Highlight one or more entries in the X12 ROUTING TABLE window.
   b. Select DE-ACTIVATE.

   When an entry is OFF, the system does not check each incoming message against the entry's criteria.,

To add a table entry:

1. In the X12 ROUTING TABLE window, click ADD. The ADD X12 ROUTING window appears.

Figure 5.2-2 ADD X12 ROUTING Window

The ADD X12 ROUTING window enables you to set routing criteria for incoming message traffic.

2. Click the list box following the SOURCE field to display a list of valid communications channels. Select the channel over which the message was received. Note that this field displays ALL by default.

3. Click the ON/OFF box to activate or deactivate routing.

   - ON: Messages are routed based on the criteria for the entry.
   - OFF: Messages are not checked or routed based on the criteria for the entry.

4. To specify that the system route only incoming messages addressed to a certain VAN, gateway, or AIS, enter the name of that VAN, gateway, or AIS in the ISA/GS TO field. To activate this routing criteria, toggle on the knob preceding the field.

5. To specify that the system route only incoming messages that are received from a certain VAN, gateway, or AIS, enter the name of that VAN, gateway, or AIS in the ISA/GS FROM field. To activate this routing criteria, toggle on the knob preceding the field.

6. To specify that the system route only incoming messages that contain a certain file prefix, enter that prefix in the FILE PREFIX field. To activate this routing criteria, toggle on the knob preceding the field.
7. To specify that the system route all incoming messages, toggle on the knob preceding the ALL field. If this knob is toggled on, any information in the preceding three fields will not be accepted.

8. In the CHANNEL box, select the channel to send the message. To specify a different channel:

   a. Click the list box to show a list of other channels, and select a channel from the list.

   b. For EMAIL channels, a scroll list appears below the CHANNEL field with other destination choices. Click the checkboxes in the scroll list to direct the message(s) to the selected sites.

   An incoming message is automatically routed to the channel destination(s) entered in the CHANNEL box if:

- The message matches the routing criteria entered in the SOURCE box and the X12 ROUTING box.
- The ON/OFF checkbox is toggled ON.

9. To add the entry to the routing table, click OK.

To edit a table entry:

1. In the X12 ROUTING TABLE window, double-click the table entry, or click it once and then click EDIT. The EDIT X12 ROUTING window appears. This window has the same format as the ADD X12 ROUTING window.

2. For instructions on editing the table entry, see the instructions provided for Figure 5.2-2.

To delete a table entry:

1. In the X12 ROUTING TABLE window, select one or more entries to be deleted.

2. Click DELETE. Each selected entry is removed without warning.

5.3 Network Host Table

The Network Host Table option is not available at this time.

5.4 EMAIL Address Table

The EMAIL Address Table option enables you to create and maintain a table of addresses for sites that communicate by email. Using the EMAIL Address Table option, you can do the following:

- Access the address table.
- Add an address.
- Edit an address.
- Delete an address.

To access the address table:

From the Interfaces menu, select EMAIL Address Table. The EMAIL DIRECTORY window appears.

Figure 5.4-1 EMAIL DIRECTORY Window

This window displays an entry under the following column headings for each entry in the address table:

ID
Three-character code identifying the email address.

NAME
Real name of the user.

USERNAME
Actual system user name.

HOSTNAME
Name of the destination machine.

To add an address:

1. In the EMAIL DIRECTORY window, click ADD. The ADD EMAIL ENTRY window appears.

Figure 5.4-2 ADD EMAIL ENTRY Window

2. In the ID field, enter a three-character code to identify the email address.
3. In the NAME field, enter the name of the user to receive email.
4. In the USERNAME field, enter the system user name of the user to receive email.
5. In the HOSTNAME field, enter the name of destination machine.
6. When all fields are filled, click OK to accept the new address.

To edit an address:

1. In the EMAIL DIRECTORY window, double-click the address, or click it once and then click EDIT. The EDIT EMAIL ENTRY window appears. This window has the same format as the ADD EMAIL ENTRY window.
2. For instructions on editing the address, see the instructions provided for Figure 5.4-2.

To delete an address:

1. In the EMAIL DIRECTORY window, select one or more entries to be deleted.
2. Click DELETE. Each selected entry is removed without warning.

5.5 Seg Terminator DB

Use the Seg TerminatorDB option to normalize incoming messages and convert outgoing messages to the required message format for the receiving node. Segment terminators are the different characters used by different sites to indicate the end of a message segment. In order to convert an "unreadable" message to a readable format, the segment terminator characters must be identified and replaced. The segment terminator database ensures that each incoming message from a designated node is reformatted so that ECPN can process the message. The segment terminator database also ensures that each outgoing message intended for a designated node is reformatted to the necessary format so that the node can process the message.

In order for an incoming, message to be processed by an ECPN node, some characters in the message may need to be changed or deleted. Blank lines may also need to be deleted. The segment terminator database contains the character-substitution and line-deletion information required for each node. The system searches this database for the destination node name and uses the associated character-substitution information to reformat the message. Certain characters (designated by their ASCII codes) may be replaced with certain other characters (also designated by their ASCII codes). Other characters (or blank lines) may be designated to be removed from the message.

When messages are sent to a node that may not be able to process normalized message formats, some characters in the message may need to be changed. The system uses the same character-substitution information used to translate incoming messages to convert the outgoing message to the required format. The character-substitution information is actually reversed, this time replacing the specific characters with their equivalents.

Using the Seg TerminatorDB option, you can do the following:

- Access the segment terminator database.
- Add a segment terminator.
- Edit a segment terminator.
- Delete a segment terminator.

To access the segment terminator database:

From the Interfaces menu, select Seg Terminator DB. The SEGMENT TERMINATOR DATABASE window appears.

Figure 5.5-1 SEGMENT TERMINATOR DATABASE Window

This window displays an entry under the following column headings for each node/communications channel in the segment terminator database:

STATUS

Segment terminator status; either ON or OFF. This status can be changed by selecting STATUS ON or STATUS OFF from the window's pop-up menu.

When ON, the segment terminator information maintained in the database is active, and any incoming message routed to the node will be reformatted to a normalized message that can be processed by the system. Also, any outgoing message will be reformatted to the required message format for the receiving node.

When OFF, the segment terminator information is inactive. It has no effect on any messages routed to or from the node.

NODE NAME

Name of the node or communications channel designated for the node (must be an existing channel name).

To add a segment terminator:

1. In the SEGMENT TERMINATOR DATABASE window, click ADD. The ADD NODE SEG TERMS window appears.

Figure 5.5-2 ADD NODE SEG TERMS Window

2. In the NODE NAME field, enter a unique node/communications channel name. This name must be an existing channel name.

3. In the DELETIONS box, enter/verify the character settings (ASCII value and octal format) for characters that are to be deleted from an incoming message. The system will use these settings to delete unwanted characters as it reformats an incoming message. Specify the settings in the DELETIONS box as follows:

   a. To add a character (to be deleted) setting:

      - In the DELETIONS box, click ADD. The ADD NODE DEL window appears.

Figure 5.5-3 ADD NODE DEL Window

- In the DELETE OCTAL field, enter the octal number of the character that is to be deleted, or choose it from the selection-list window (accessed by clicking the checkbox next to the DELETE OCTAL field name). To delete blank lines, enter blank_lines in the DELETE OCTAL field (or choose blank_lines in the selection-list window).

- Click OK.

b. To edit a character (to be deleted) setting:

- In the DELETIONS box, double-click the character setting, or click it once and then click EDIT. The EDIT NODE DEL window appears. This window has the same format as the ADD NODE DEL window.

- For instructions on editing the character setting, see the instructions provided for Figure 5.5-3.

c. To delete a character (to be deleted) setting:

NOTE: No warning/confirmation window appears when deleting character settings from the ADD NODE SEG TERMS window. Ensure that only the character settings to be deleted are selected before clicking DELETE.

- In the DELETIONS box, select each character setting to be deleted.

- Click DELETE. Each character setting selected is deleted from the database.

4. In the REPLACEMENTS box, enter/verify the character settings (ASCII value and octal format) for characters in an incoming message that are to be replaced with a different character value. The system will use these settings to replace characters with new ones as it reformats an incoming message to a normalized format. The system will also use these settings (in a reverse manner) to replace "new" characters in an outgoing normalized message with "old" format characters that will effectively reformat the outgoing message. Specify the settings in the REPLACEMENTS box as follows:

   a. To add a character (to be replaced) setting:

   - In the REPLACEMENTS box, click ADD. The ADD NODE REPL window appears.

Figure 5.5-4 ADD NODE REPL Window

- In the OLD CHAR field, enter the character that is to be replaced, or choose it from the selection-list window.
- In the NEW CHAR field, enter the character that is to replace the old character, or choose it from the selection-list window.

- Click OK.

b. To edit a character (to be replaced) setting:

- In the REPLACEMENTS box, double-click the character setting, or click it once and then click EDIT. The EDIT NODE REPL window appears. This window has the same format as the ADD NODE REPL window.
- For instructions on editing the character setting, see the instructions provided for Figure 5.5-4.

c. To delete a character (to be replaced) setting:

NOTE: No warning/confirmation window appears when deleting character settings from the ADD NODE SEG TERMS window. Ensure that only the character settings to be deleted are selected before clicking DELETE.

- Select each character setting to be deleted.
- Click DELETE. Each character setting selected is deleted from the database.

To edit a segment terminator:

1. In the SEGMENT TERMINATOR DATABASE window, double-click the segment terminator, or click it once and then click EDIT. The EDIT NODE SEG TERMS window appears. This window has the same format as the ADD NODE SEG TERMS window.
2. For instructions on editing the segment terminator, see the instructions provided for Figure 5.5-2.

To delete a segment terminator:

1. In the SEGMENT TERMINATOR DATABASE window, select the entry to be deleted.
2. Click DELETE. A warning window appears, asking if you wish to delete the entry.
3. Click OK to delete the entry, or click Cancel to cancel the deletion.

5.6 Remote User DB

The Remote UserDB option enables you to maintain a database for accessing files sent from remote sites via ftp or email.

Using the option, you can do the following:

- Access the remote user database.
- Activate one or more remote users.
- Deactivate one or more remote users.
- Add a remote user.
- Edit a remote user.
- Delete a remote user.

To access the remote user database:

From the Interfaces menu, select Remote UserDB. The REMOTE USER DATABASE window appears.

Figure 5.6-1 REMOTE USER DATABASE Window

This window contains an entry under the following column headings for each user in the database:

LOGIN NAME
Login name of the remote user.

DIRECTORY NAME
Directory name of the remote user.

TYPE
Type of channel: FTP or EMAIL.

STATUS
Status of the remote user: ACTIVE or INACTIVE.

To activate one or more remote users:

In the REMOTE USER DATABASE window, select each desired entry with a STATUS of INACTIVE and then select ACTIVATE from the window's pop-up menu.

To deactivate one or more remote users:

In the REMOTE USER DATABASE window, select each desired entry with a STATUS of ACTIVE and then select DEACTIVATE from the window's pop-up menu.

To add a remote user:

1. From the REMOTE USER DATABASE window, click ADD. The ADD LOG NAME window appears.

Figure 5.6-2 ADD LOG NAME Window

2. In the TYPE box, select EMAIL or FTP to specify the method by which the remote user will log into the system.

3. In the LOGIN NAME field, enter the login name (up to 8 characters) of the remote user.

4. In the PASSWORD field, enter a password (up to 8 characters) for the user. The displayed password will change to all asterisks (*) when Return is pressed.

5. In the DIRECTORY field, enter the directory of the remote user. This name must start as an existing channel name, but a subdirectory may be added (e.g., <channel name>/abc). If you do not know the existing channel name, a listing can be found in the COMMUNICATIONS window (Figure 5.1-1).

6. The COMMENTS field contains the statement EC/EDI REMOTE USER ACCOUNT and is uneditable.

7. To add the entry to the remote user database, click OK.

To edit a remote user:

1. In the REMOTE USER DATABASE window, double-click the remote user, or click it once and then click EDIT. The EDIT LOG NAME window appears. This window has the same format as the ADD LOG NAME window.

2. For instructions on editing the remote user, see the instructions provided for Figure 5.6-2.

To delete a remote user:

1. In the REMOTE USER DATABASE window, select the entry to be deleted and then click DELETE. A warning window appears, asking if you want to delete the entry.

2. Click OK. The remote user is deleted from the database, and another warning appears, asking if you want the entry deleted from the UNIX password file. (If you choose to leave the entry in the UNIX password file and attempt to use the same login name at a later time, a warning window appears, asking if you wish to overwrite the entry.)

   a. To delete the entry from the UNIX password file, click OK.

   b. To leave the entry in the UNIX password file, click Cancel.

Section 6
Alerts

The options on the Alerts menu enable you to monitor and act upon system-generated alerts. The Alerts menu provides the following options:

Set Alert Level
To specify the alert level(s) for which you want the system to generate alerts.

Alert Log
To view a log of system-generated alerts.

Notification DB
To create notification actions for specific alerts.

Notification Message
To modify the email notification message.

6.1 Set Alert Level

Each ECPN alert condition is assigned a specific level: high, medium, or low. (High is the most critical.) The Set Alert Level option enables you to specify the alert level(s) for which you want the system to generate alerts.

To specify the alert level for the system:

1. From the Alerts menu, select Set Alert Level. The SET ALERT LEVEL window appears.

Figure 6.1-1 SET ALERT LEVEL Window

2. In the ACCEPT ALERTS box, select the alert level for the system:

   ALL
   Generate alerts for all alert conditions (low, medium, and high).

   LEVEL 1&2
   Only generate alerts for alert conditions that are classified as medium or high.

   LEVEL 1
   Only generate alerts for alert conditions that are classified as high.

   NONE
   Do not generate alerts for any alert condition.

3. Click OK.

6.2 Alert Log

The Alert Log option provides access to the ECPN alert log. This log contains each alert generated by ECPN. Using the Alert Log option, you can do the following:

- View the alert log.
- Dismiss an alert from the log.

To view the alert log:

From the Alerts menu, select Alert Log. The NEP ALERT LOG window appears.

Figure 6.2-1 NEP ALERT LOG Window

The NEP ALERT LOG window contains an entry under the following column headings for each alert in the log. (The log can contain up to 2,500 alerts. After 2,500 alerts have been entered, the next alert will cause the log to"wrap," removing the oldest alert and placing the newest one at the end of the list.

DATE/TIME
The date and time that the alert was generated.

TYPE
Type of alert generated. Alert types include the following:

- FTP INCOMPLETE
- FTP UNAVAILABLE
- CLEO
- KERMIT
- SITE INVALID
- X12 VALIDATION
- X12 FAILED DECODE
- CHANNEL DIED
- NO X12 AF ENTRY
- RAW ARCHIVE FAILED
- X12 UDF CONV
- CIM APPEND FAILED
- MPR MESSAGE LOST
- EMAIL ERROR
- ZMODEM
- NO LOCAL USER
- EMAIL RECV
- SEG TERM

KEY
Name of the key that generated the message, which is usually the name of the site.

INFORMATION
Other identifying information for the alert.

To dismiss an alert from the log:

1. In the NEP ALERT LOG window, select the alert(s) to be dismissed.

2. Click DISMISS.

6.3 Notification DB

The NotificationDB option enables you to specify each user who should be notified of a specific alert condition and the method by which the user(s) should be notified. You may notify yourself and/or other users via email or beeper. You may also specify that a notification window appear on your workstation each time a certain alert condition occurs. Up to 10 notifications can be designated for each alert type in the alert notification database.

Using the NotificationDB option, you can do the following:

- View the notification database.
- Add an alert notification to the database.
- Edit an alert notification in the database.
- Delete an alert notification from the database.

To view the notification database:

1. From the Alerts menu, select NotificationDB. The ALERT NOTIFY LOG window appears.

Figure 6.3-1 ALERT NOTIFY LOG Window

The ALERT NOTIFY LOG window contains an entry under the following column headings for each alert notification in the log:

ALERT TYPE
Type of alert generated.

KEY
Name of the key that generated the message, which is usually the name of the site.

NUM ACTIONS
Number of alert actions that are currently associated with the specific alert.

To add an alert notification to the database:

1. In the ALERT NOTIFY LOG window, click ADD. The EDIT NOTIFY ACTIONS window appears, displaying the options available for notification.

Figure 6.3-2 EDIT NOTIFY ACTIONS Window

2. Click the box preceding the ALERT TYPE field to display a list of alert types for which you can assign a notification. These alert types are as follows:

   - FTP INCOMPLETE
   - FTP UNAVAILABLE
   - CLEO
   - KERMIT
   - SITE INVALID
   - X12 VALIDATION
   - X12 FAILED DECODE
   - CHANNEL DIED
   - NO X12 AF ENTRY
   - RAW ARCHIVE FAILED
   - X12 UDF CONV
   - CIM APPEND FAILED

- MPR MESSAGE LOST
- EMAIL ERROR
- ZMODEM
- NO LOCAL USER
- EMAIL RECV
- SEG TERM

3. Double-click an alert type. Your selection appears in the ALERT TYPE field.

4. In the (KEY) field, enter the key that corresponds to the alert type, or enter an asterisk (*), which will match any key for the alert type. The default entry of NO KEY changes to reflect your selection.

5. To activate the notification action, click the ACTIVE checkbox. This checkbox may be deselected at any time to disable the notification process without deleting the entry from the notification database.

6. To specify the desired method of notification (either an email message, a beeper page, or a window on your workstation), select the toggle knob for either EMAIL, BEEPER, or WINDOW.

   a. If EMAIL is selected:

      - In the ADDRESS field, enter the email address of the person to whom the notification should be sent. (To edit the text of the notification message, use the Notification Message option as described in Section 6.4.)

      - Using the INCLUDE FILE checkbox, indicate whether an attachment should be sent along with the email notification. If this checkbox is selected, the file which generated the alert will be automatically attached and sent as part of the email.

   b. If BEEPER is selected: In the PHONE # field, enter the phone number of the beeper to be paged. Any valid (beeper) phone number may be entered in this field.

   c. If WINDOW is selected: Using the CONFIRM checkbox, indicate whether the notification window that will appear on your workstation should remain displayed until it is manually dismissed. This window will provide information on the specific key and alert generated.

NOTE: Up to 10 notification actions may be applied to each alert type in the notification database. In order to inform more than one contact of an alert condition, several notification actions may be required for a single alert.

7. To add another notification action to the alert type currently displayed in the ALERT TYPE field:

   a. Click ADD. All items in the ACTIONS box are cleared, and the NUM ACTIONS and CURRENT ACTIONS fields increase by one. The entries in the ALERT TYPE and (KEY) fields remain the same. Any editing of the ALERT TYPE or (KEY) fields will affect all notification actions for the alert type, not just the one currently displayed.

b. Repeat Step 6. The NUM ACTIONS field will increase by one to reflect the current number of actions associated with the alert type.

8. To view the previous or next notification action for the current alert type, click either PREV or NEXT. The CURRENT ACTIONS field changes to reflect the number of the action.

9. To delete a notification action for the current alert type, use the NEXT or PREV button to display the action that you wish to delete and then click DELETE. The NUM ACTIONS and CURRENT ACTIONS fields change to reflect the deletion.

10. To save the changes to the notification database, click OK.

To edit an alert notification in the database:

1. In the ALERT NOTIFY LOG window, double-click the alert notification, or click it once and then click EDIT. The EDIT NOTIFY ACTIONS window appears.

2. For instructions on editing the alert notification, see the instructions provided for Figure 6.3-2.

To delete an alert notification from the database:

1. In the ALERT NOTIFY LOG window, click the alert notification to be deleted.

2. Click DELETE.

6.4 Notification Message

The email notification message is included as the first portion of any email sent to notify a user of an alert condition. Tl email notification message is kept in a text file and may be modified using the Notification Message option. The notification message generated for email transmission (when email is selected in the EDIT NOTIFY ACTIONS window) appears on the first line of the message, followed by specific details about the key, alert type, date, and time of the alert in the subsequent lines of the message. The email notification message may be modified for individual user or site use.

To access the email notification message:

1. From the ALERTS menu, select Notification Message. The EDIT EMAIL NOTIFICATION MESSAGE window appears, displaying any previously saved email notification message in the text box.

Figure 6.4-1 EDIT EMAIL NOTIFICATION MESSAGE Window

2. To modify the email notification message:

   a. In the text box, place the pointer as desired and click once.

b. Insert up to 20 lines of text. Each line can hold up to 67 characters. After 67 characters, press either [Return] or [Enter] to move the pointer to the next line. Arrow keys may also be used to move from line to line.

c. To delete text, select it with the pointer and press the delete key.

3. Click SAVE. The new message is saved, and any previously saved message is overwritten.

Section 7
Oracle

The options on the Oracle menu allow the user to manage the Oracle database used for archiving purposes.

The Oracle menu provides the following options:

Query Archive
: Text forthcoming.

7.1 Query Archive

Text forthcoming.

Section 8
Misc

The options on the Misc menu enable you to perform miscellaneous ECPN functions. The Misc menu provides the following options:

Version Description
: To identify the version of ECPN that is currently running and view a text description of this version.

Top 25 Processes
: To display the 25 processes (requiring the most CPU time) running on the local machine.

Time Zone Conversion
: To use a tool that calculates time zone differences.

8.1 Version Description

The Version Description option uses NetScape Navigator to access a text description of the version of ECPN that is currently running.

To access the version description information:

1. From the Misc menu, select Version Description. ECPN invokes NetScape Navigator and accesses the version description document.

2. For further details on using NetScape Navigator, refer to the documentation supplied with it. (See Section 3.3 for details.)

8.2 Top 25 Processes

The Top 25 Processes option enables you to view the 25 processes that are competing for the largest amount of CPU time on a computer.

To view the top 25 processes on a computer:

From the Misc menu, select Top 25 Processes. The top window appears, listing the 25 processes that are demanding the most CPU time, in descending order.

Figure 8.2-1 top Window

The listing shown in the top window is dynamic and is automatically updated as system processes change.

8.3 Time Zone Conversion

The Time Zone Conversion option enables you to calculate time zone differences. You can enter a known time in any o the time zone fields (ZULU/GMT, EST, CST, MST, or PST), and the system will automatically calculate the correct time in each of the other time zones.

NOTE: The Time Zone Conversion tool does not effect the system time set on the node on which it is running. It is intended as a time zone calculation aid only.

To calculate time zone differences:

1. From the Misc menu, select Time Zone Conversion. The DTG CONVERSION window appears, displaying the current ZULU/Greenwich Mean Time (GMT) and the corresponding time in each U.S. time zone.

Figure 8.3-1 DTG CONVERSION Window

2. Enter a specific Date-Time Group (DTG) upon which to base the time zone calculations. The DTG must be entered in the appropriate field (as discussed below) in the format of HH:MM DD MMM YY, where HH is the hour (in 24-hour time convention), MM is the minute, DD is the date, MMM is the first three letters of the month name, and YY is the last two digits of the year. (Incorrectly formatted entries will not be accepted, and the field will turn red to indicate the error.)

   a. To base the calculation upon a DTG in the ZULU/GMT time zone, enter the DTG in the ZULU/GMT field.

   b. To base the calculation upon a DTG in a U.S. time zone, enter the DTG in the appropriate field in the US TIMEZONES box, as follows. (Note that the system automatically compensates for changes in time due to U.S. Daylight Savings Time. If a DTG entry indicates that it occurs during U.S. Daylight Savings Time, the system calculates the appropriate U.S. Daylight Savings Time and displays it in the US TIMEZONES box.)

      - EST- Eastern Standard Time (5 hours earlier than GMT).
      - CST - Central Standard Time (6 hours earlier than GMT).
      - MST - Mountain Standard Time (7 hours earlier than GMT).
      - PST - Pacific Standard Time (8 hours earlier than GMT).

3. View the calculations displayed in the window.

4. To close the DTG CONVERSION window, click EXIT.

Appendix A

GenWatch

The Geographically Enhanced Network Watch (GenWatch) application is accessed from the GenWatch option on the System menu. Selecting this option invokes GenWatch but does not suspend ECPN operations. GenWatch is a diagnostic tool for pinpointing troubled / downed nodes on a network.

GenWatch enables an operator at any workstation to monitor the operational status and associated information for each node on the network, as well as trace the route that GenWatch uses to monitor node sites. GenWatch is also capable of managing a node information database.

To start the GenWatch application:

1. From the System menu, select GenWatch. GenWatch loads the default map, and the GenWatch Geographic Display window appears. The map in this window displays the geographic location and user-defined shortname of each node. Symbols allow you to determine the type and current status of each node (as discussed in Step 2).

Figure A-1 GenWatch Geographic Display Window

In the upper left corner of the GenWatch Geographic Display window, a menu bar is displayed. The submenus on this menu bar provide access to specific GenWatch functions. These functions are described in this appendix as follows:

System Menu
: To exit the GenWatch application. (Section A.1)

Map Options Menu
: To manipulate the GenWatch Geographic Display window. (Section A.2)

Plot Control Menu
: To control how objects are plotted in the GenWatch Geographic Display window. (Section A.3)

Database Menu

To use utility-type functions to manage GenWatch databases. (Section A.4)

Tools Menu

To use various tools for troubleshooting connectivity problems. (Section A.5)

2. View the map displayed in the GenWatch Geographic Display window. Node symbols, determined by the node type, are displayed on the map at the latitude and longitude assigned when the node was originally created. Symbols are displayed in colors that indicate their status. Color is discussed in the description of Figure A.4-1. Possible GenWatch node symbols displayed are as follows:

3. To change the current map display, use the map display buttons in the lower left corner of the window, from left to right, as follows:

   a. Use the zoom button, represented by crossed arrows, to redraw and plot a zoomed view of a specific area of the current map display. This button performs the same function as ZOOM on the Map Options menu (described in Section A.2).

b. Use the center button, represented by a circle, to change the center of the map. This button performs the same function as CENTER ON CURSOR on the Map Options menu (described in Section A.2).

c. Use the half button, represented by a magnifying glass with a plus sign in it, to halve the width of the current map display or increase (+) the magnification of the map. This button performs the same function as HALF on the Map Options menu (described in Section A.2).

d. Use the double button, represented by a magnifying glass with a minus sign in it, to double the width of the current map display or decrease (-) the magnification of the map. This button performs the same function as DOUBLE on the Map Options menu (described in Section A.2).

e. Use the whole world button, represented by a globe, to display the whole world on the map. This button performs the same function as WHOLE WORLD on the Map Options menu (described in Section A.2).

f. The next four buttons are active only when 3D View is selected with the map projection button (discussed in Step h). Use these buttons to control the perspective in 3D mode.

g. The compass button, represented by a compass, is active only when 3D View is selected with the map projection button (discussed in Step h). Use this button to change the horizontal view of the map projection within 360 degrees.

h. Use the map projection button to select which map projection to display for the current map: Mercator, Orthogonal, Cylindrical, Lamb Conformal, Stereographic, Azimuthal E-D, or 3D View.

4. In the lower left section of the GenWatch Geographic Display window, view the map coverage box. This box displays the width of the screen in nautical miles (NM), rounded to the nearest tenth of a mile. This box can also be toggled to display the map scale (scale 1:30000) by clicking it once. Clicking it again returns it to the screen width.

5. To the immediate right of the map coverage box, view the pointer position box. This box displays the current position of the pointer, initially as latitude and longitude; however, clicking the position box causes the display to reflect different measurements:

   a. Click once to show the position in degrees, minutes, and seconds (LL 74:56:21N 053:15:11E).

b. Click again to show the position in degrees, minutes, seconds, and tenths of seconds (LL 74:56:20.9N 053:15:10.9E).

c. Click again to show the Military Grid Reference System (MGRS) position (MGR 39XWD-65334-18056).

d. Click again to show the Universal Transverse Mercator (UTM) value for the pointer position (UTM +39 8318056 0565334).

e. Click again to show the geographical reference point value for the pointer position (GEORLJQ1556).

6. To the immediate right of the pointer position box, view the status area box. This box displays the current status of any drawing actions being performed on the chart.

A.1 System Menu

The System menu in the GenWatch Geographic Display window (Figure A-1) provides the option for exiting the system. To exit GenWatch, select Exit from the System menu.

A.2 Map Options Menu

The Map Options menu in the GenWatch Geographic Display window (Figure A-1) provides options to manipulate and enhance the GenWatch geographic display. Use these selections to do the following:

- Control the map dimensions and fields of view.
- Zoom the map view on specific geographic areas for ease of viewing multiple sites.
- Store and recall maps for specific areas.

Use the options on the Map Options menu as follows:

1. Use Zoom to redraw and plot a zoomed view of a specific area of the current map as follows. Note that the Zoom option functions the same as the zoom button in the GenWatch Geographic Display window.

   a. From the Map Options menu, select Zoom.

   b. Click and hold the left trackball on a point to be the center of the new map.

   c. Drag the pointer outward from the point to form a zoom box.

   d. Release the left trackball button, and the area in the zoom box fills the screen. The smallest zoom width is 0.10 NM.

2. Use Double to redraw the map around the current center point to double the current horizontal map width. Note that the Double option functions the same as the double button in the GenWatch Geographic Display window.

   When the Mercator projection is used to view the map, the maximum map width is determined by the latitude of the center point. Thus, at the equator the maximum width is 21,600 nautical miles, while at the poles the maximum width is smaller.

   If doubling the current map makes the map width larger than the maximum, the width displays at maximum width.

3. Use Half to redraw the map around the current center point to reduce the current horizontal map width by half as follows. Note that the Half option functions the same as the half button in the GenWatch Geographic Display window.

   a. From the Map Options menu, select Half. The window displays a moderately "zoomed-in" view of the map.

b. Select Half additional times to "zoom" in by half-widths each time. The smallest view width is 0.10 NM across.

4. Use Center On Cursor to center the map on a specified pointer position as follows. Note that the Center On Cursor option functions the same as the center button in the GenWatch Geographic Display window.
   a. From the Map Options menu, select Center On Cursor. The pointer appears as a black dot.

   b. Move the pointer to a position for the center and click the left trackball button. The map is immediately redrawn around the new center point, and the map width remains the same.

5. Use Features to select various features from the Map Features window that may be plotted on the current map. No further data currently available on Map Features.

A.3 Plot Control Menu

The Plot Control menu in the GenWatch Geographic Display window (Figure A-1) provides the Symbols ON/OFF/DOTS option. This option enables you to control how node types are plotted on the current map display. The nodes can be either plotted with standard symbols, plotted as dots, or not plotted at all.

To manipulate symbol plotting:

1. From the Plot Control menu, select Symbols ON / OFF DOTS. The SYMBOLS ON/OFF/DOTS window appears.

Figure A.3-1 SYMBOLS ON / OFF / DOTS Window

The SYMBOLS ON / OFF / DOTS window contains symbols that illustrate how each node type will appear when plotted as a symbol. The symbols are colored according to their status.

2. To apply the same display mode to all node types, use the ON, DOTS, or OFF button as follows.

   a. To plot all node types as symbols (which are illustrated in the symbols list), click ON.

   b. To plot all node types as dots instead of symbols, click DOTS.

   c. To turn off the plotting of all node types, click OFF.

3. To modify the display of an individual node type, click the symbol for that node type in the symbols list to toggle between a symbol, dots, and off.

4. To accept the settings in the SYMBOLS ON/OFF/DOTS window, click APPLY.

5. To close the window and cancel any changes made since the last APPLY, click EXIT.

A.4 Database Menu

The Database menu in the GenWatch Geographic Display window (Figure A-1) provides options to manage the GenWatch databases. These options enable you to do the following:

- View the node database, from which you can perform the following operations:
  - -- Add a node to the database.
  - -- Run a system information query on a node.
  - -- Edit a node in the database.
  - -- Delete one or more nodes from the database.
- Write all of the node information currently in the database to a disk archive file. This archive file cannot be written to any other destination.
- Read all node information currently located in the archive file on disk.
- Set the user ping rate, which is the interval that GenWatch will wait between checks of all nodes in the user-defined ping rate group.
- Set the host name of the master database manager for GenWatch on the LAN.

To view the node database:

1. From the Database menu, select Node Summary. The GenWatch Node Summary window appears.

Figure A.4-1 GenWatch Node Summary Window

The GenWatch Node Summary window displays a summary of all nodes in the database. Eight columns of information appear by default in the window; but any or all of the following columns may be selected to appear. (To select the columns to display, see Step 2 below. To update the data at any time, click REFRESH. To manage the nodes in the database, see the remainder of this subsection. To close the GenWatch Node Summary window, click EXIT.)

COLOR

The color of the node on the map display:

- GREEN - A good connection is established between the terminal and the node.
- RED - The connection is down between the node and the ECPN terminal.
- YELLOW - Response time is at least twice the threshold value established for the node.

- GRAY - An inactive node (see STATE, below).

STATE

Node status. Determined from the Edit Node window for the node. Possible values are as follows:

- ACTIVE - A node that GenWatch is currently monitoring. Color may be red, green, or yellow.
- INACTIVE - A node that GenWatch is not currently monitoring. GenWatch will not continue to ping an inactive node, thereby cutting down on traffic sent to the node. Color is always gray.

NAME

Full node name, including the node name and the domain.

SHORTNAME

The short name of the node.

IP ADDRESS

The IP address of the node.

CONNECTION (THRESHOLD)

Type of connection used between the GenWatch machine and the monitored node. This value is used to determine threshold values so that GenWatch can alert the user that certain connections are slower than defined parameters (see NODE STATE, above). The connection types and their threshold values for expected response times are as follows:

- LAN - 5 milliseconds
- NORM WAN - 25 milliseconds
- SLOW WAN - 310 milliseconds
- SATELLITE - 620 milliseconds

CHECK RATE (PING RATE)

Controls the frequency of GenWatch status checks for the node. If the user does not have a "real-time" need for the status of a node, it is possible to reduce the rate, thus reducing GenWatch-generated traffic. All nodes in the current database will be checked at the same time, no matter which rate is selected. Possible values for this field are as follows:

- FAST - 10 seconds
- MED - 45 seconds
- SLOW - 120 seconds
- USER DEF - User-defined rate (must be at least 15 seconds)

NODE STATE

The current hardware status of the node. The node state should match its color. Possible values for this field are as follows:

- UP - Node responded to the GenWatch ping in an expected manner.
- DOWN - Node did not respond to the GenWatch ping.
- SLOW - Node responded to the GenWatch ping, but the response time was more than twice the expected response time for the type of connection.

LAST GOOD CHECK (STAT DTG)

The DTG (Date Time Group) of the last successful ping for the node.

RESP TIME (STAT RESP)

Time, in milliseconds, that it took for the node to reply to GenWatch during its last successful check. If the node is down, this field displays 0. This field can be used to quickly determine which connections are slow.

LATITUDE

The latitude of the node.

LONGITUDE

The longitude of the node.

TYPE

The type of node as configured. Possible values for this field are as follows:

- ROUTER
- NEP SERVER
- NEP CLIENT
- VAN SERVER
- VAN CLIENT
- GATEWAY SERVER
- GATEWAY CLIENT
- GENERAL HOST (PC,Macintosh® , etc.)
- GENERAL OBJECT (any other type of object)

SNMP?

Status of the Simple Network Management Protocol (SNMP) running on a remote node: YES if the SNMP is active, or NO if the SNMP is inactive.

DATA RATE

Calculation in packets per second of traffic activity for the node. Applies only to nodes that are SNMP active.

2. To select columns to display in the GenWatch Node Summary window:

   a. In the GenWatch Node Summary window, click and hold the right trackball button.

   b. From the pop-up menu, select SELECT COLUMNS. A DOUBLE LIST window appears, displaying all available columns in a double-column list format.

Figure A.4-2 DOUBLE LIST Window

   c. To display additional columns, select each additional column in the REMAINING COLUMNS list and then click the ==> button to move it to the SELECTED COLUMNS list. Ensure all columns you wish to appear in the GenWatch Node Summary window are listed in the SELECTED COLUMNS field.

   d. To remove a column from display, select each column to be removed in the SELECTED COLUMNS list and click the <== button to move it to the REMAINING COLUMNS list. Ensure all columns you wish to appear in the GenWatch Node Summary window are listed in the SELECTED COLUMNS field.

   e. Click EXIT.

3. To display the default (all) columns in GenWatch Node Summary window:

   a. In the GenWatch Node Summary window, click and hold the right trackball button.

   b. From the pop-up menu, select DEFAULT COLUMNS. All columns are displayed in the GenWatch Node Summary window.

To add a node to the database:

1. In the GenWatch Node Summary window, click ADD. The Edit Node window appears.

Figure A.4-3 Edit Node Window (ADD Function)

2. In the NAME field, enter the full name of the node. This name can be used to resolve the IP address for the node, if applicable. Each node in the database must have a unique name. Duplicate entries are not allowed.

3. In the SHORT NAME field, enter the short name of the node. This name can be either the node name without the domain or a user-defined name. This name appears as the label for the node on the map. If this field is not completed, GenWatch uses the first 11 characters of the entry in the NAME field as the short name. Each node in the database must have a unique short name.

4. In the ADDRESS field, enter the IP address of the node. This address must appear in the following format: four three-digit numbers (each between 0 and 255), separated by periods. If an illegally formed address is entered, a warning window appears. The address in this field must be correct before GenWatch can enter the node into the database. If the IP address is unknown, the LOOKUP IP button may be used as follows to determine the IP address:

   a. Click LOOKUP IP. GenWatch looks up the IP address for the node, using the full name entered in the NAME field. If the IP address is determined using the node name, the system automatically fills in the ADDRESS field.

   b. If GenWatch is unable to resolve the address, a warning window appears, notifying you that the node name was not found. If this occurs, you must manually enter the IP address.

5. In the TYPE field, enter the type of node. This field includes a drop-down box that lists the valid entries for this field. These values are the same as the values for the TYPE field in the GenWatch Node Summary window, described earlier in this section.

6. In the POSITION field, verify or enter the latitude and longitude location for the node.

7. Use the ACTIVE checkbox to toggle the status of the node. A node is activated if the box is yellow and deactivated if it is gray.

8. Use the SNMP checkbox to toggle the status of the Simple Network Management Protocol (SNMP) daemon running on a remote node. The SNMP function on a node is activated if the box is yellow and deactivated if it is gray.

9. Use the SYSINFO button as discussed later in this subsection.

10. In the COMMUNITY field, view the community string used to connect to the remote node's SNMP daemon. This field is generally used as a password to establish the validity of a request when one node contacts another node.

11. In the THRESHOLD column, select the appropriate knob to indicate the type of node connection. The connection type determines the threshold value, which is the expected response time for the node. The threshold value for each type of connection is displayed in the VALUE field below the knobs when the connection type is selected. The connection types and their threshold values for expected response times are as follows:

    - LAN - 5 milliseconds
    - NORM WAN - 25 milliseconds
    - SLOW WAN - 310 milliseconds
    - SATELLITE - 620 milliseconds

12. In the PING RATE column, select the appropriate knob to determine how often GenWatch checks on the node. All nodes within this group will be pinged according to the rate set here. The ping rate value for the check is displayed in the VALUE field below the knobs when the ping rate is selected. Possible values for this field are as follows:

    - FAST - 10 seconds
    - MED - 45 seconds
    - SLOW - 120 seconds
    - USER DEF - User-defined rate (must be at least 15 seconds)

13. In the LAST STAT column, view the current status of the node being edited. Possible status values are as follows (and are not editable):

    - NET - Current hardware state of the machine. Possible values are UP, DOWN, or SLOW.
    - TIME - Date and time of the last successful ping of the node.
    - RESP - Time, in milliseconds, it took the node to respond the last time GenWatch successfully determined the status of the node. If the node is down, this field is blank.
    - RATE - This option is not available at this time.

14. To apply the changes and create the node in the database, click OK.

To run a system information query on a node:

1. In the Edit Node window (Figure A.4-3), click SYSINFO. The System Info Viewer window for the node appears.

Figure A.4-4 SystemInfo Viewer Window (Typical)

   This window displays a blank text area in which specific data will appear when one of the buttons is clicked.

2. To view the available data on the processes currently running on the node, click Processes.

3. To view the available data on the ECPN channels that have been established on the node, click Channels.

4. To view the available data on the status of any established, activated channels on the node, click Channel Status.
5. To view system-specific information such as system point of contact and IP address, click System. The data that appears is the same as that displayed in the GenWatch SNMP Dump Viewer window when the SYSTEM button is clicked.

6. To view interface-specific information for the network interfaces established on the remote node, click Interfaces. The data that appears is the same as that displayed in the GenWatch SNMP Dump Viewer window when the INTERFACES button is clicked.

7. To view the available SNMP data (provided that the SNMP function is activated in the Edit Node window), click the Dump button. The GenWatch SNMP Dump Viewer window appears.

Figure A.4-5 GenWatch SNMP Dump Viewer Window

   a. In the Hostname field, verify or enter the IP address of the remote node.

   b. In the Community field, verify or enter the currently configured network "password" required to connect to the remote node's SNMP daemon.

c. To view system-specific information such as system point of contact and IP address, click SYSTEM.

d. To view interface-specific information for the network interfaces established on the remote node, click INTERFACES.

e. To view ARP table information about the remote node, click AT.

f. To view IP-specific information about the remote node, click IP.

g. To view ICMP-specific information about the remote node, click ICMP.

h. To view TCP-specific information about the remote node, click TCP.

i. To view UDP-specific information about the remote node, click UDP.

j. To view SNMP-specific information about the remote node, click SNMP.

k. To stop the current information request at any time during a network search, click CANCEL.

l. To exit the GenWatch SNMP Dump Viewer window, click EXIT.

8. To exit the System Info Viewer window, click EXIT.

To edit a node in the database:

1. In the GenWatch Node Summary window (Figure A.4-1), double-click the node, or click it once and then click EDIT. The Edit Node window (Figure A.4-3) appears.

2. For instructions on editing the node, see the instructions provided for Figure A.4-3.

To delete one or more nodes from the database:

1. In the GenWatch Node Summary window, select each node to be deleted; or, to delete all nodes from the database, click and hold the right trackball button and select DELETE ALL from the pop-up menu.

NOTE: No warning/confirmation window appears when deleting nodes from the GenWatch Node Summary window. Ensure that only the nodes to be deleted are selected before clicking the DELETE button.

2. Click DELETE. Each selected node is deleted from the database.

To write all of the node information currently in the database to a disk archive file:

1. From the Database menu, select Write Archive. A warning window appears, requiring confirmation of the operation.

NOTE: When OK is selected, the system will overwrite a pre-existing archive file with the new information. The new archive file cannot be written to any other destination.

2. Click OK. An archive file is created that contains all information currently in the node database.

To read all node information currently located in the archive file on disk:

1. From the Database menu, select Read Archive. A warning window appears, requiring confirmation of the command.

NOTE: When OK is selected, the system replaces all information currently in the GenWatch Node Summary window with the information from the archive file.

2. Click OK. The archive file is read into the GenWatch Node Summary window.

To set the user ping rate:

1. From the Database menu, select Set User Rate. A text entry window appears.

2. Enter the desired interval between pings (in seconds) into the USER PING RATE field. The entry must be greater than 15.

3. Click OK.

To set the host name of the master database manager for GenWatch on the LAN:

1. From the Database menu, select Set Master Host. A text entry window appears.

2. Enter the desired master host name.

3. Click OK.

A.5 Tools Menu

The Tools menu in the GenWatch Geographic Display window (Figure A-1) provides a network trace tool called GWTrace. GWTrace is a monitoring tool designed to simplify network troubleshooting.

GenWatch monitors nodes that may or may not be directly linked to the monitoring node. Therefore, GenWatch often needs to relay a status request to several intervening sites, which pass the status request along in a "chain-like" manner until it reaches the distant site. For example, GenWatch may be running on a terminal in Columbus, Ohio, which is monitoring nodes in several other states, including a node in Ogden, Utah. As the monitoring terminal in Columbus does not have a direct data line link to the node in Ogden, it must relay the status request along an indirect route as follows: Columbus starts by relaying the status request to a site in Philadelphia, which then relays the status request to Minneapolis, which then relays the status request through Denver, which then relays the status request through Sacramento, before the Sacramento node finally relays the status request to the node in Ogden. If the status from the Ogden node is lost, the problem could be located in the Ogden node itself or in any one or more of the nodes used to relay the status request across country.

The GWTrace option on the Tools menu allows the monitoring site to run a trace through each of the intervening sites t try to determine the point in the relay where a node is disabled. Once the disabled node site has been pinpointed, operator intervention can be employed to enable a resolution to the problems and bring the site back to an active status.

To run a trace:

1. From the Tools menu, select GWTrace. The GenWatch Traceroute window appears.

Figure A.5-6 GenWatch Traceroute Window

2. In the HOST field, enter the IP address of node route to be traced. This address can be obtained from the Edit Node window (Figure A.4-3) for the node.

3. Click TRACE. GenWatch traces the route of the different sites it is using to relay the status request to the selected node site. As each node site along the route is contacted and checked, its long name (if available), IP address, and the response time (in milliseconds) is displayed in the scroll box in the GenWatch Traceroute window.

   The system will make three attempts to contact a node in the route. In the cases where a node is down and does not respond, each attempt to contact that node is marked with an asterisk (*) in the scroll box next to the number designated for that node. If GenWatch encounters a node that is down during the trace, the trace will automatically stop.

On the current map display in the GenWatch Geographic Display window, any node that is in the current node database and displayed on the map, and that is also a relay for the node being traced, appears blinking from its current status color to white until the trace is either completed or canceled. In this manner, the trace can be followed across the map, and a quick check can inform you of the location of a disabled site. Once the trace has been completed, the identified nodes remain displayed in white on the map until CANCEL or EXIT is clicked or a new trace is run.

When the trace is successfully completed, the TRACEROUTE COMPLETE message appears at the bottom of the GenWatch Traceroute window. If the trace is canceled before it is completed, a TRACEROUTE CANCELLED message appears. If a node is not in the current database, or if the IP address cannot be resolved with a name, GenWatch uses only the IP address as an identifier.

4. To stop the trace and keep the GenWatch Traceroute window open, click CANCEL.

5. To close the GenWatch Traceroute window, click EXIT.

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